

Work Order ID **110052**

December-17-13 9:07:04 AM

**\*110052\***

Page 1

Item ID: D2249-041

Accept

**\*N900040100\***

Setup Start

**\*NS1\***

Revision ID:

Stop

**\*NS2\***

Item Name: Fitting Assembly

Start Date: 12/17/13 Start Qty: 4.00

**\*4\***

Cust Item ID:

Required Date: 12/17/13 Req'd Qty: 4.00

**\*4\***

Customer:

Reference:

Run Start

**\*NR1\***

Approvals:

Process Plan: 12Date: 12-17-13

Tooling:

Date:

Stop

**\*NR2\***

QC:

Date:

SPC (Y/N):

Date:

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
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Draw Nbr	Revision Nbr
D2249	Rev E

100

0.00

**\*100\***

Large Fab

Large Fab

Memo

0.00

Weld as per Dwg D2249 and QSI 004

Rod #: 125054

110

0.00

**\*110\***

QC

Quality Control

QC9- Inspect visual per QSI004- Fusion Welds

Memo

0.00

120

0.00

**\*120\***

QC

Quality Control

QC5- Inspect part completeness to step on W/O

Memo

0.00

x4 ml 14.09.084 SEP 10 2014 DAS  
24  
9-894 SEP 10, 2014 DAS  
24  
9-89

# Work Order ID 110052

\*110052\*

Page 2

December-17-13 9:07:04 AM

Item ID: D2249-041 Accept \*N900040100\* Setup Start \*NS1\*  
 Revision ID: Stop \*NS2\*  
 Item Name: Fitting Assembly  
 Start Date: 12/17/13 Start Qty: 4.00 \*4\* Cust Item ID:  
 Required Date: 12/17/13 Req'd Qty: 4.00 \*4\* Customer:  
 Reference:

Approvals: Process Plan: \_\_\_\_\_ Date: \_\_\_\_\_ Tooling: \_\_\_\_\_ Date: \_\_\_\_\_ Run Start \*NR1\*  
 QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_ Stop \*NR2\*

Sequence ID/ Work Center ID	Operation Description	Set Up/ Run Hours	Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp
130 *130* Powdercoat Powder Coating	White Gloss(Ref:4.3.5.2) per OSI005 4.3-Steel <i>M 128931</i> Memo START TIME: <i>10:10</i> <i>7:00</i> FINISH TIME: <i>10:40</i> OVEN TEMPERATURE:	0.00 0.00				<i>1</i>	<i>0</i>	<i>14-9-12</i>	<i>DAS 34 9:09</i>
140 *140* QC Quality Control	QC3- Inspect Part Finish Memo	0.00 0.00				<i>4</i>	<i>0</i>	<i>14/09/15</i>	
150 *150* Packaging Packaging	Identify as per dwg & Stock Location: <i>81522</i> Memo	0.00 0.00				<i>4x</i>		<i>14-9-15</i>	<i>DAS 26 9:09</i>

December-17-13 9:07:04 AM

**Item ID:** D2249-041

**Accept**

**\*N900040100\***

Setup Start \*NS1\*

**Revision ID:**

Stop \*NS2\*

**Item Name:** Fitting Assembly

**Start Date:** 12/17/13      **Start Qty:** 4.00

**\*4\***

**Cust Item ID:**

**Required Date:** 12/17/13      **Req'd Qty:** 4.00

**\*4\***

**Customer:**

**Reference:**

Run Start \*NR1\*

**Approvals:**      **Process Plan:** \_\_\_\_\_ **Date:** \_\_\_\_\_ **Tooling:** \_\_\_\_\_ **Date:** \_\_\_\_\_

Stop \*NR2\*

QC: \_\_\_\_\_ Date: \_\_\_\_\_ SPC (Y/N): \_\_\_\_\_ Date: \_\_\_\_\_

Sequence ID/  
Work Center ID

Operation	Description
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2	...
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Set Up/  
Run Hours

Tool ID	Tool #	Plan Code	Accept Qty	Reject Qty	Reject Number	Insp. Stamp

160

QC21- Final Inspection - Work Order Release

0.00

**\*160\***

OC

## Memo

0.00

## Quality Control

MF  
14-9-15

# Picklist Print







December-17-13 9:07:04 AM

Page 1

Work Order ID: 110052  
 Parent Item: D2249-041  
 Parent Item Name: Fitting Assembly

Start Date: 12/17/13 Required Date: 12/17/13  
 Start Qty: 4.00 Required Qty: 4.00

Comments: IPP: D 05.02.04Added Step 9KJ/RF  
 IPP Rev:E 08-07-28 chg qty of D2249-1 DD verified by:EC

Component Item ID/ Item Name	Replacement Item ID	Mfg/ Purch	Bin Item	Primary Location	Last Location	Route Seq ID	Unit of Measure	Qty on Hand	Qty per Kit	Total Qty	Qty Issued	Date Issued	Status
<b>D2249-1</b> Lug		Manufactured	No			100	Each	8.0000	2	 8		27e 14-01-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA002		8							
						2			x2				
						6			x6				
<b>D2249-3</b> Base Plate		Manufactured	No			100	Each	19.0000	1	 4		27e 14-01-22	
				<u>Location</u>		<u>Loc Qty</u>		<u>Loc Code</u>					
				WA002		19							
						7			x4				
				40893		12							
<b>D2249-5</b> Gusset		Manufactured	No			100	Each	0.0000	2	 8		27e 14-01-22	

B110303 x8

DQA: \_\_\_\_\_ Date: \_\_\_\_\_



## WORK ORDER NON-CONFORMANCE / UPDATE

QA Closed: \_\_\_\_\_ Date: \_\_\_\_\_

Work Order update only ☐

Work Order: _____  Part No. _____  NCR No. _____	<b>DISPOSITION</b>  Rework <input type="checkbox"/> Scrap <input type="checkbox"/> Use-as-is <input type="checkbox"/> Suspected Unapproved <input type="checkbox"/>	<b>AGAINST DEPARTMENT/PROCESS</b>  <table style="width: 100%;"> <tr> <td>Skid-tube <input type="checkbox"/></td> <td>Crosstube <input type="checkbox"/></td> <td>Water Jet <input type="checkbox"/></td> <td>Engineering <input type="checkbox"/></td> </tr> <tr> <td>Machining <input type="checkbox"/></td> <td>Small Fab <input type="checkbox"/></td> <td>Prod. Eng. Coord. <input type="checkbox"/></td> <td>Quality <input type="checkbox"/></td> </tr> <tr> <td>Thermoforming <input type="checkbox"/></td> <td>Finishing <input type="checkbox"/></td> <td>Rec/Store/Packaging <input type="checkbox"/></td> <td>Other <input type="checkbox"/></td> </tr> <tr> <td>Large Fab <input type="checkbox"/></td> <td>Composite <input type="checkbox"/></td> <td>Supplier <input type="checkbox"/></td> <td></td> </tr> </table>	Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>	Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>	Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>	Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>	
Skid-tube <input type="checkbox"/>	Crosstube <input type="checkbox"/>	Water Jet <input type="checkbox"/>	Engineering <input type="checkbox"/>															
Machining <input type="checkbox"/>	Small Fab <input type="checkbox"/>	Prod. Eng. Coord. <input type="checkbox"/>	Quality <input type="checkbox"/>															
Thermoforming <input type="checkbox"/>	Finishing <input type="checkbox"/>	Rec/Store/Packaging <input type="checkbox"/>	Other <input type="checkbox"/>															
Large Fab <input type="checkbox"/>	Composite <input type="checkbox"/>	Supplier <input type="checkbox"/>																

Root Cause	Date	Step	Qty	Description of work order update or non-conformance	Initial Chief Eng	Action Description	Sign & Date	Verification	QC Inspector
Design									
Doc/Data									
Equip/Tooling									
Handling/Pre									
Material									
Operator									
Offset/Setup									
Process									
Supplier									
Training									
Transport									
Unapproved									

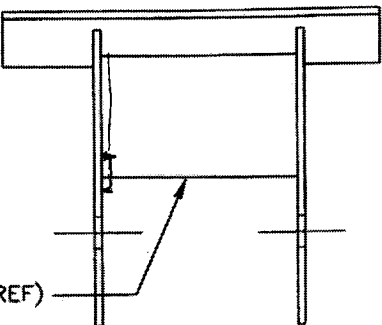
### FAULT CATEGORY

<b>Landing Gear</b> <input type="checkbox"/> Bending <input type="checkbox"/> Centre Not Concentric <input type="checkbox"/> Cracks <input type="checkbox"/> Crimp/Kink/Ripple/Wave <input type="checkbox"/> Cuffs <input type="checkbox"/> Crushing <input type="checkbox"/> Heat Treat <input type="checkbox"/> Inspection Strip in Tube <input type="checkbox"/> Marks/Chatter <input type="checkbox"/> Turning Sequence <input type="checkbox"/> Wave/Twist in Tube	<b>General</b> <input type="checkbox"/> Bend <input type="checkbox"/> BOM/Route <input type="checkbox"/> Broken/Damage/Defect <input type="checkbox"/> Burrs <input type="checkbox"/> Contamination <input type="checkbox"/> Countersink <input type="checkbox"/> Cut Too Short <input type="checkbox"/> Drawing <input type="checkbox"/> Drill Holes <input type="checkbox"/> Finish <input type="checkbox"/> Fit/Function	<input type="checkbox"/> Folio/Program <input type="checkbox"/> Grain <input type="checkbox"/> Hardware <input type="checkbox"/> Inspection Incomplete/Unqualified <input type="checkbox"/> Instructions Incomplete/Unclear <input type="checkbox"/> Misaligned/off center <input type="checkbox"/> Mislabeled <input type="checkbox"/> Misread <input type="checkbox"/> Off-set <input type="checkbox"/> Out of Calibration <input type="checkbox"/> Out of Sequence	<input type="checkbox"/> Outside Dimensions <input type="checkbox"/> Over/Under tolerance <input type="checkbox"/> Part Incorrect <input type="checkbox"/> Part Lost/Missing <input type="checkbox"/> Part Moved <input type="checkbox"/> Positioned Wrong <input type="checkbox"/> Power Loss/Surge  <input type="checkbox"/> Pressure/Forced <input type="checkbox"/> Set-up <input type="checkbox"/> Temperature/Cure <input type="checkbox"/> Weld <input type="checkbox"/> Wrong Stock Pulled <input type="checkbox"/> Other
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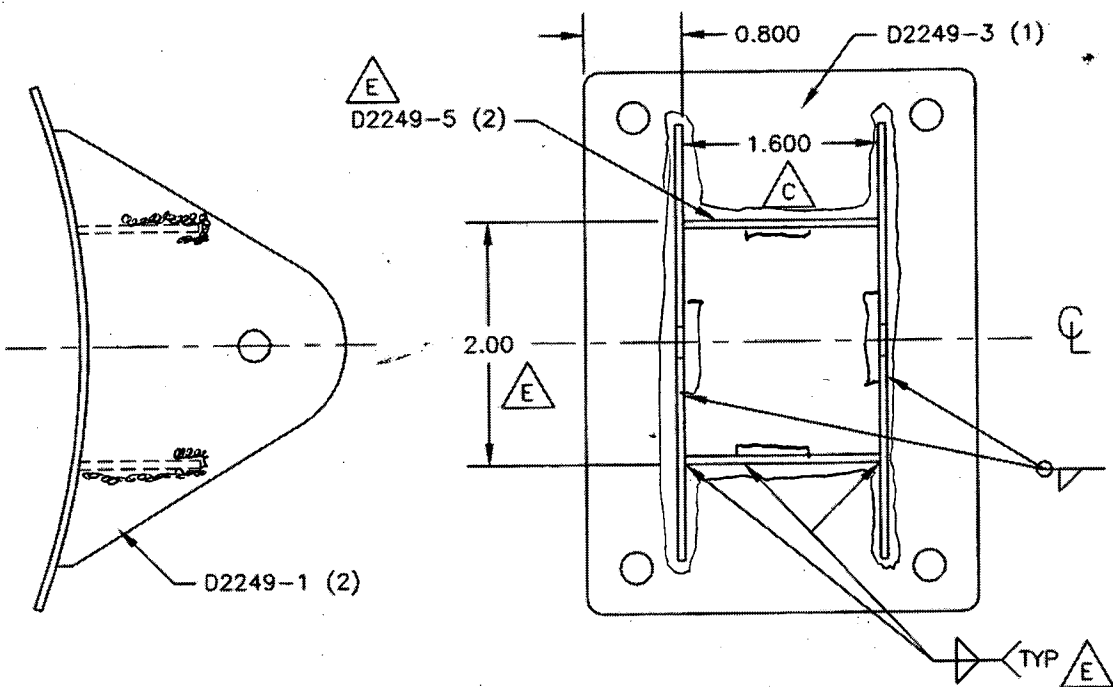


RELEASED  
99.10.12 KZ

DESIGN		DRAWN BY		DART AEROSPACE LTD	
CHECKED		APPROVED		HAWKESBURY, ONTARIO, CANADA	
DATE		TITLE		REV. E	
99.09.20		FITTING		SHEET 1 OF 4	
A		94.06.20		NEW ISSUE	
B		95.11.30		DIMENSION CHANGE	
C		95.12.14		DIMENSION CHANGE	
D		98.04.30		Ø0.261 WAS Ø0.257 (TSR A179) REMOVED DUPLICATE DIMENSIONS	
E		99.09.20		ADDED GUSSET	



E D2249-5 (REF)



D2249-041 ASSEMBLY

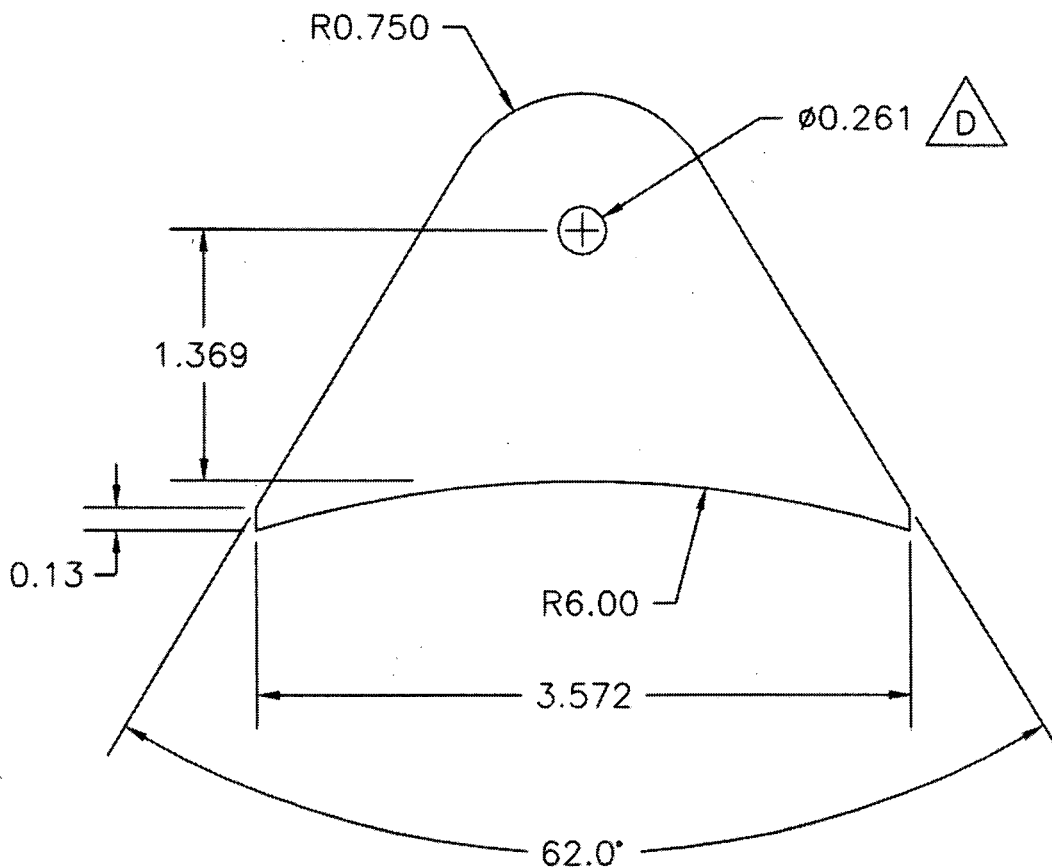
MATERIAL: AISI 304/316 SS, 0.063 THICK  
WELD PER DART QSI 004  
FINISH: POWDER COAT WHITE (4.3.5.2) PER DART QSI 005 4.3  
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE SPECIFIED



DESIGN <i>KE</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2249	REV. E SHEET 2 OF 4
DATE 99.09.20	TITLE FITTING		SCALE 1:1

RELEASED  
99.10.12 *KE*

110052



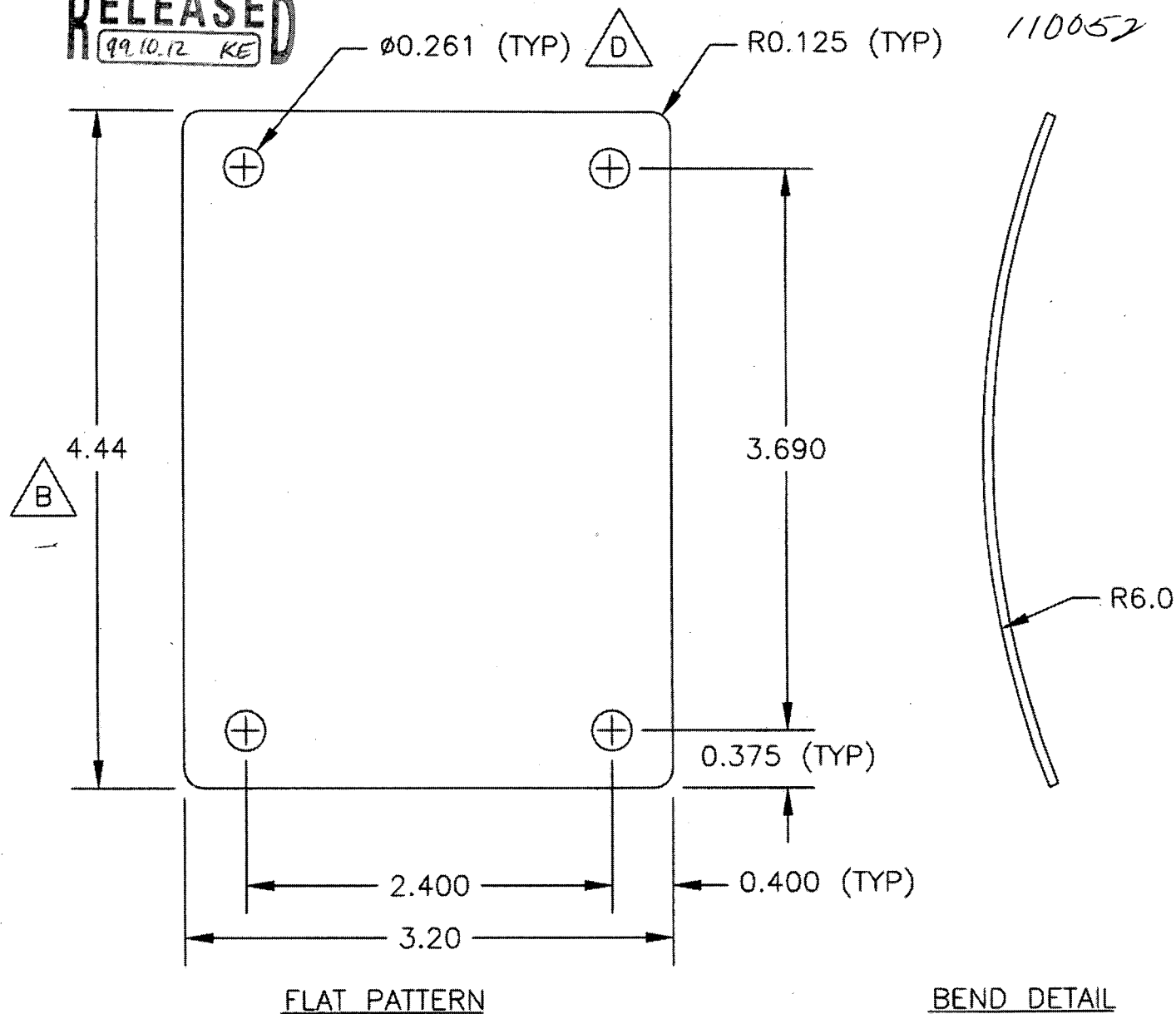
D2249-1 LUG

MATERIAL: AISI 304/316 SS 0.063 THICK  
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED



DESIGN <i>KE</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2249	REV. E SHEET 3 OF 4
DATE 99.09.20		TITLE FITTING	SCALE 1:1

RELEASED  
99.10.12 KE



D2249-3 BASE PLATE

MATERIAL: AISI 304/316 SS 0.063 THICK  
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED

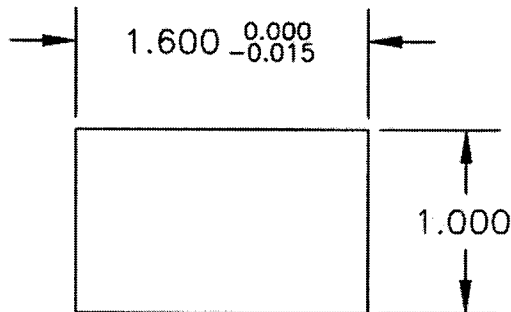




DESIGN <i>KE</i>	DRAWN BY <i>RF</i>	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>KE</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D2249	REV. E SHEET 4 OF 4
DATE 99.09.20		TITLE FITTING	SCALE 1:1

RELEASED  
99.10.12 KE

110052



D2249-5 GUSSET

MATERIAL: AISI 304/316 SS 0.063 THICK  
ALL DIMENSIONS ARE IN INCHES  
TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED